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ABSTRACT

The effect oral reading fluency has on comprehension is still being ascertained. This project examines the role of fluency and the effect it has on analysis skills. The purpose of this study is to show that fluency affects overall reading comprehension. Literature supports the view that fluent reading frees up capacity for the comprehension of text. This study utilizes both a quantitative and qualitative approach in analyzing oral reading fluency in young children. Thirteen third-grade Title 1 students from an elementary school located north of San Francisco were assessed using the Qualitative Reading Inventory II. Students read a passage orally to assess for fluency and prosody; the passage was timed and miscues were noted. This was followed by eight text implicit-explicit questions. Students were given a second passage to read; however, with the second passage the students were permitted to practice reading it three times prior to their assessment. All students showed an increase in the number of words read correctly per minute from the pretest to the posttest, as well as in the area of prosody. Six of the students showed an increase in their comprehension scores, while three showed no increase, and three students indicated a decrease in their comprehension scores. While the repeated reading of text does lead to an increase in the number of words read correctly per minute and an increase in student's accuracy, there were too many variables that influenced the results to show a significant correlation between oral reading fluency and comprehension. Further research is needed with a variety of age groups over an extended period of time. An appendix presents a description of the four levels of the National Assessment of Educational Progress' Oral Reading Fluency Scale. (Contains 14 references and a table of data.) (Author/RS)

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Title Page

The Effect of Oral Reading Fluency on Analysis Skills

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Abstract

The effect oral reading fluency has on comprehension is still being ascertained. This project examines the role of fluency and the effect it has on analysis skills. The purpose of this study is to show that fluency effects overall reading comprehension. Literature supports the view that fluent reading frees up capacity for the comprehension of text.

This study utilizes both a quantitative and qualitative approach in analyzing oral reading fluency in young children. Thirteen third-grade Title 1 students from an elementary school located north of San Francisco were assessed using the Qualitative Reading Inventory-II. Students read a passage orally to assess for fluency and prosody; the passage was timed and miscues were noted. This was followed by 8 text implicit-explicit questions. Students were given a second passage to read; however, with the second passage the students were permitted to practice reading it 3 times prior to their assessment.

All students showed an increase in the number of words read correctly per minute from the pretest to the posttest, as well as in the area of prosody. Six of the students showed an increase in their comprehension scores, while 3 showed no increase, and 3 students indicated a decrease in their comprehension scores.

While the repeated reading of text does lead to an increase in the number of words read correctly per minute and an increase in student's accuracy, there were too many variables that influenced the results to show a significant correlation between oral reading fluency and comprehension. Further research is needed with a variety of age groups over an extended period of time.

Introduction

The effect oral reading fluency has on analysis skills is beginning to be recognized. It is June in a first-grade classroom. Students are reading a three- page story about Hermit Crab, then answering questions. "Amber" struggles through it, word by word. By the time she has finished decoding the first page of the story, she remembered very little. Too much energy was spent on the basic decoding task. This is not an uncommon plight amongst struggling readers.

Reading fluency has long been an overlooked component of reading instruction. If a student's fluency is poor, he or she spends too much time trying to decode words, rather than analyzing meaning.

Current research indicates that there is a relationship between oral reading fluency and comprehension. Rasinski (2000, p. 147) states, "Research dating back over 60 years suggests that faster readers tend to have better comprehension over what is read and tend to be overall, more proficient readers." However, while becoming a fluent reader is important, it remains a neglected goal of reading instruction (Allington, 1983).

While a link has been established between oral reading fluency and comprehension, many questions remain unanswered: Do students reach a level developmentally where they no longer benefit from direct fluency instruction? How would an intensive fluency program benefit "at risk" students in terms of bridging the gap between their current reading level and the desired grade level? What is the best way to implement a reading fluency component in the classroom? Additionally, there is limited research on the impact of fluency on the second language learner.

Purpose

The purpose of this study was to examine the relationship between oral reading fluency and analysis skills and to determine whether "at risk" students can benefit directly from a reading program that includes oral reading fluency instruction as one of its major components. This concept was explored through a study using third-grade students, employing both quantitative and qualitative approaches. Students' accuracy, speed, and prosody were evaluated, as well as recall of the passage read. Two passages were administered, both tape-recorded: In passage number 1, the students were timed, miscues noted, and questions evaluating the students' recall of the story were recorded. Passage number 2 followed the same procedure with the exception that the students could practice reading it three times. In addition, the students were asked to do an oral retelling of the story. Prosody was noted on the second passage based on a scale of 1-4 (see appendix).

Review of Previous Literature

History and Early Research

Is oral reading fluency a good indicator of overall reading competence? Theoretical arguments would suggest that these factors are related. LaBerge and Samuels (1974) are credited with making the first significant contribution to this field with their theory of automaticity in reading. According to this theory, readers have a limited amount of cognitive capacity available. It can be used for the surface level task of decoding or the deeper level task of comprehension. When readers become "automatic" in their recognition of sight words and other text, their reading rate increases and more

cognitive capacity is available for comprehension, thereby leading to improved comprehension.

Earlier research done by Cattell (1886) and Huey (1908-1968) found a connection between word reading and speed. Cattell discovered that letters and words were named faster than other items like colors or pictured objects. Cattell was the first researcher to note the significance of words being read as fast as letters and how reading speed increased when semantic information was included, as in a sentence format (Wolf & Katzir-Cohen, 2001).

Huey described behaviors in reading similar to those posited by LaBerge and Samuels. According to Huey, fluent reading is comprised of subskills; as the reader becomes more proficient through practice, these subskills merge. Through repetition the reader finds the act itself easier, speed increases, and the reader pays less conscious attention to the process (Wolf & Katzir-Cohen, 2001).

A century ago elocution was emphasized, elocution " . . . the oral performance of a text that provided an interpretive rendition, allowing the listener to understand the writer's argument and message." (Stayter & Allington, 1991, p. 144) Oral reading fluency was the determiner of one's reading competence. In the early 1900's, emphasis was placed on silent reading instead, and silent reading became the focus of reading instruction. However, the relationship of elocution to oral reading fluency is clear. Chomsky (1972) showed that as children reread text, they develop a familiarity with it and control over syntactic structures.

Stayter and Allington observed a language arts class of heterogeneously grouped seventh-graders using repeated readings with an emphasis on fluency as a means of

understanding the texts. The class spent five days reading, rehearsing, and performing short dramas. Students stated that the repeated readings deepened their understanding of the text. Stayter and Allington concluded that comprehension could be assessed using informal measures (e.g. exhibition): When a reader speaks or portrays a character through voice, tone, actions, and attitude, comprehension is evident. Additionally, instruction on oral reading and practice with it can contribute to better analysis of text. Reading fluency needs to be considered past the primary grades as a means to improve comprehension.

Fluency and Comprehension

While fluency is regarded as an important element of reading instruction, there is little agreement about the relationship between fluency and other aspects of reading development, nor is there one definition to describe a fluent or nonfluent reader. Nathan and Stanovich (1991) contend that oral reading fluency is intertwined with reading comprehension. Fluency is regarded as fast and automatic word recognition; automaticity is a characteristic of it, as is prosody. Past research indicates that fluent word recognition is necessary for good comprehension. As cognitive capacity is limited, students have only so much attention to devote to a task. This is known as limited cognitive capacity. When word recognition is fluent, students are able to direct their attention to comprehension.

Nathan and Stanovich (1991) reviewed a year- long study that examined the importance of modeling fluent reading with second graders. The students were divided into ten-control and ten-experimental classes. The teachers of the experimental groups read aloud to their students daily for twenty minutes, followed by the students performing

an activity, such as dramatization or painting a significant scene from the book. At the end of the study, the experimental group was ahead of the control group in reading comprehension and vocabulary. Findings of the study indicated that fluency could be enhanced by practice, which in turn leads to vocabulary growth and improved comprehension.

According to Rasinski (2001), reading rate is an essential component of reading and "is significantly correlated with other measures of proficient reading such as standardized and informal measures of comprehension and word accuracy." (p. 1) Rasinski found that all of the students referred to Kent State University's reading clinic for diagnosis had difficulties in reading rate efficiency. He contends that recent studies show that reading rate is correlated with comprehension and reading ability. Rasinski (1990) found three conceptions of fluency to be good predictors of comprehension; these are: 1) Automatic word recognition-readers need both speed and accuracy in decoding. 2) Contextual word recognition-the idea that previously read and understood material contributes to further word recognition in a text, which leads to increased comprehension. 3) Text phrasing-parsing text into phrasal units. A study using 3rd and 5th grade students examined oral readings followed by a cued recall, multiple-choice test on the passage read, and a parsing task. The results indicated that all the correlations between fluency and comprehension were statistically significant with the exception of retelling and text phrasing. "This suggests that fluency measures were reasonable predictors of comprehension." (Rasinski, 1990, p. 41) The study also indicated that oral reading fluency is a multi-dimensional construct.

Fuchs, Fuchs, and Hosp (2001) cite earlier studies to support the theory that oral reading fluency is an indicator of overall reading competence. A 1988 study using the reading comprehension subtest from the Stanford Achievement Test as a criterion measure was one. Seventy students from middle and junior high school read two-400 word passages, then answered 10 short response questions orally. Another measure was passage recall. Using the same passages as above, students read for 5 minutes, then had 10 minutes to retell the passage. A third measure of comprehension was the cloze procedure for the same 400-word passage. Reading fluency also was assessed. The same two passages were read aloud for 5 minutes while errors were recorded. Words read correctly were averaged for the two passages.

Fuchs, et al. concluded that additional studies were needed to extend the existing knowledge of oral reading fluency in ways to make its measurement more useful and practical for teachers and researchers. Currently there are some reliable and valid measures for assessing oral reading fluency. Oral reading fluency exercises should be incorporated into assessment in order to make instructional decisions and develop potential reading treatments. Fuchs, et al. felt that " . . . mea ment of oral reading fluency may serve as a strong indicator of overall reading competence because it captures individual differences in a number of reading subcomponents at lower and higher levels of processing." (Fuchs, et al., p. 10)

Reutzel and Hollingsworth (1993) assert that past research has shown a strong link between developing students' oral reading fluency and concurrent improvements in reading comprehension. Based on the research of Rasinski (1990) and Dowhower (1991) showing a connection between comprehension and fluency, the authors wanted to explore

this concept further by using oral recitation lessons (ORL) as a way to develop second grade students' oral reading fluency, then assess its impact upon comprehension. Seventy-eight second graders were selected from two elementary schools in the Rocky Mountain region. They were randomly assigned to an ORL treatment group or a round robin (RR) reading group for a semester. They spent 30 minutes daily working on fluency. The ORL group followed the routine of 1) reading/presentation; 2) rehearsal/ practice; 3) performance/recitation. The control group encouraged fluency through a round robin style of oral reading. Both groups used the same texts and spent 50 minutes per day in reading instruction. Students were given the Iowa Test of Basic Skills (ITBS) comprehension posttest and an oral reading/retelling. Students were allowed to read the story three times prior to fluency testing. Running records were kept as students read aloud. The time needed for reading the story was also recorded and compared to the total number of errors; that equaled "errors per minute" ratio as a measure of fluency. Reutzel and Hollingsworth (1993) found that ORL improves reading fluency, as well as comprehension. In 3 out of 4 measures of comprehension, ORL students showed better fluency and comprehension as compared to RR groups. The results confirmed Rasinski's findings regarding the correlation between fluency and comprehension. The findings suggest a causal link between improving student's reading fluency and simultaneously improving their reading comprehension. However, only one grade level was assessed; further research is needed to study older and younger students.

Rasinski (2000) looked at the relationship between speed and comprehension. He felt that reading rate is one way to evaluate student's overall reading performance, and disfluent or "inefficient reading" is a common manifestation of reading problems.

Specifically, he examined children in grades 2-5 who were referred to Title 1 reading services in Akron, Ohio. Students were asked to read a passage at their grade level and one level below using informal reading inventory procedures.

The informal reading inventory indicated overall that comprehension and word recognition were at a student's frustration level; however, students were near the threshold for their instructional level. With some intervention these students could be moved on to that level. Rasinski cited previous research to show that slow reading is associated with poor reading performance and comprehension.

Deficiencies with Previous Research

Even though reading fluency is regarded as an important element of proficient reading, it remains a neglected component of reading instruction. Reading rate has received little attention for years in terms of assessment and diagnosis. Some would suggest that reading rate doesn't matter, as long as a reader reads well. Previous research has found several methods effective in increasing oral reading fluency (Allington, 1983). However, little attention is given to these methods in textbooks or in teacher training (Rasinski, 1990).

Another deficiency is that a wide range of reading rates exist at various grade levels; researchers have not agreed upon an appropriate reading rate, nor the times during the school year that these rates should be attained. If reading rate is going to be a useful tool for identifying and assisting students with reading problems, then definitive rate standards must be established. Rasinski cites previous studies that illustrate these inconsistencies. One study using 5th grade students indicated that 108-140 words per minute (wpm) should be the goal (Gilmore & Gilmore, 1968); another done by Durrell

(1955) using 5th graders found that 150 wpm was an appropriate rate; Stroud and Henderson (1943) stated that the average 5th grade student should read 181-185 wpm.

Rasinski conducted an experiment on reading rate using 100 college students. He gave them 12th grade narrative and expository text, then timed their oral reading for one minute marking errors. The average rate was 166.4 wpm; word recognition accuracy was 99.34%, which indicated that this was the students' independent reading level. This rate was inconsistent with rates cited by Allington, Harris and Sipay. According to their rates, all of the college students read below the minimally adequate reading rate and would be considered poor readers using that criteria (Rasinski, 2001).

Wolf and Katzir-Cohen (2001) contend that increased research is needed in the issues surrounding fluency and comprehension to contribute to our understanding of reading development. Fluency goes through periods of great gains, followed by disinterest. Allington (1983) regarded fluency as the "most neglected" reading skill. There is still much to learn about the development of reading skills and how they influence reading rate and comprehension. Wolf and Katzir-Cohen state that there is disagreement about the definition of fluency and its related terms; this is critical, as definitions influence how we diagnose and treat fluency problems.

Wolf and Katzir-Cohen cited an intervention project done in 1995 by Morris, Lovett, and Wolf. In the study 200 second and third-grade students with reading problems were instructed in small groups for 70 sessions. Each session consisted of 30 minutes of RAVE-O, Retrieval, Automaticity, Vocabulary, Engagement, and Orthography, and 30 minutes of a phonological program. The results reflected significant gains in oral reading rate, accuracy, and comprehension. This would indicate that it is

possible to change a student's reading rate through a developmental-componential fluency program. More research is needed to evaluate comprehension and whether there is a transfer from fluency practice, such as repeated readings, to other materials. It is still unclear whether fluency and comprehension reciprocally influence one another. Further research into the development of reading fluency will lead to a greater understanding of fluency problems in children and how to correct them. The authors believe that intervention is the key; issues need to be addressed before they develop into problems. Each component and each subskill in reading needs to be looked at in fluency intervention. A focus should first be placed on accuracy, then obtaining rate.

Lipson and Lang (1991) raised questions regarding the relationship between fluency, word recognition, and comprehension, and how they differ across developmental stages. Also, if fluency is viewed as important goal of reading instruction, when should it be taught and to whom?

Lipson and Lang focused on two students, a fourth-grade girl and a fifth-grade boy; each student was given three informal reading inventories: CRI (Silvaroli, 1982), ARI (Woods & Moe, 1981), and B&R (Burns & Roe, 1985); this was part of a larger study designed to examine variability in reading (Lipson, 1985). Rate/words per minute, Aulls rating, word recognition accuracy, and comprehension were compared at each level using each assessment. The results varied depending on the measure used. The authors concluded that fluency is influenced by several factors: the reading selection, word recognition accuracy, and practice reading contextual materials. To achieve greater fluency the authors suggest the following: change reading material, alter tasks, such as the teacher reads aloud the first few pages of a book prior to the students reading it, and

encourage wide reading of a variety of materials. The need for an instructionally useful view of fluency still exists. Research done by Rasinski (1986) would suggest that automatic and contextual word identification and the phrasing of text, all affect fluency and contribute to comprehension.

Rasinski (1990) states that teachers have failed to embrace the use of oral reading fluency for several reasons: 1) The imprecise definition. Many individuals do not understand the complex nature of reading fluency and believe that it refers solely to accuracy in decoding. This frequently leads to instruction of words in isolation, rather than in passages. 2) The measurement of oral reading fluency is problematic. The standard approach has been to have a student read a graded passage, and the teacher marks errors. This method has been criticized due to its lack of a theoretical basis and on methodological grounds. Also, this approach is time-consuming in its administration, scoring, and evaluation of results.

Parker, Hasbrouck, and Tindal (1992) made discoveries similar to those of Rasinski (1990). They found that oral reading fluency was widely used as an assessment tool in special education, as well as a reliable method for identifying students for Chapter 1 assistance; however, many teachers do not regard oral reading fluency as a valid method for measuring reading comprehension, nor do teachers accept reading rate as a measure of text understanding.

Parker et al. conducted a study looking at the criterion validity of traditional oral reading fluency with two types of oral reading assessments. The first assessment was a modified version of oral reading fluency, where only meaning/severe meaning change miscues or uncorrected miscues were counted. The second assessment, also a modified

form of traditional oral reading fluency, looked at the number of words read correctly from a passage with only meaning/severe meaning change or uncorrected miscues counted, and reading time was not a consideration. Their findings suggest that both traditional oral reading fluency and oral reading accuracy where severe miscues are counted, are effective means of individual assessment; in addition, both correlate with many commonly used comprehension measures. Traditional oral fluency appears preferable for classroom use, due to the difficulty in miscue coding of oral reading ability.

Conclusion

Past research suggests that oral reading fluency has been an overlooked component of reading instruction. Not only has it been overlooked, but misused as well. Most fluency instruction in basal readers has consisted of instruction in word elements and words in isolation (Rasinski, 1990). Instead of using oral reading fluency solely as an assessment measure, it should be integrated into the classroom curriculum in a variety of ways as a means to develop higher order comprehension skills, especially with older students (Stayter & Allington, 1991). Prior to the turn of the century, oral reading fluency was an integral component of reading instruction in the form of elocution. Educators felt that oral reading fluency enabled students to develop a better understanding of text read; this understanding manifested itself in terms of inflection, emphasis, and tone of the passage (Stayter & Allington, 1991).

The literature review indicates that the following are effective methods to increase oral reading fluency: modeling fluent reading, repeated readings, and giving support while reading (Rasinski, 2000). Studies found that as rereading continued, the number of

repetitions needed to attain fluency decreased. In addition, the benefits from repeated readings appear to transfer to other materials (Homan, Klesius, & Hite, 1993). As oral reading fluency improves, so will reading rate and comprehension. While much research has been done in the area of oral reading fluency, and this past research has established a link between oral reading fluency and comprehension, there are questions left unanswered. Additional research is needed to determine specific oral reading fluency rates students should be expected to attain and by what time frame. When should fluency instruction begin, and how much time should be allotted to it during instructional time?

The purpose of this study is to explore the effect oral reading fluency has on analysis skills and especially students who might be regarded as "at risk". As more information becomes available, educators can make better decisions about the value of oral reading fluency and how to implement a fluency component into their daily reading instruction.

Method

The sample studied consisted of thirteen third-grade students I worked with several times a week as their Title 1 reading teacher. Permission to use these students in my study was requested from the site principal. As I already had the parents' written permission to work with the students, I did not need anything further. The procedures that I followed did not deviate much from my instructional practices. The students' identities will be kept confidential, and their privacy will be protected.

Data gathering strategies included the following: To gather qualitative data, the students were tape-recorded while they read a passage orally to assess for fluency and prosody. Prosody was scored using a scale of 1-4 developed by the National Assessment

of Educational Progress (NAEP). To gather quantitative data, a pretest and posttest were administered. Both assessments included reading an expository passage from the Qualitative Reading Inventory-II (QRI-II), which was timed, miscues noted, followed by eight comprehension questions: 4 text implicit and 4 text explicit. Prior to reading the passage used for the posttest, students were allowed to practice reading it three times. The number of words read correctly was determined by subtracting the number of errors from the total number of words read, multiplying that figure by 60, then dividing by the number of seconds it took the student to read the passage. The following were considered errors: mispronunciations, omissions, substitutions, reversals, and hesitations longer than 3 seconds.

Data analysis approach: Qualitative data was given a numerical score between 1 and 4 to indicate whether the student read with fluency and prosody. Quantitative data included a score reflecting the number of words read correctly in one minute (WCPM), and a score showing the number of comprehension questions answered correctly. The results from the pretest were compared to those from the posttest to determine whether any significant increase occurred. In addition, students were asked to do an oral retelling of the passage used for the posttest to further check for comprehension.

Sample and Site

This study examined the effects of oral reading fluency on analysis skills using thirteen third-grade Title 1 students. This group was comprised of five boys and eight girls. Their ethnicity consisted of the following groups: African American, Asian, Caucasian, and Latino. The children attend an elementary school located north of San

Francisco. Their socio-economic makeup was middle and lower-middle class; half of the students qualified for free or reduced lunch.

Results

All students showed an increase in the number of words read correctly per minute (WCPM) from the pretest to the posttest, as well as in the area of prosody. Six of the students showed an increase in their comprehension scores; three students showed no increase in comprehension, and three students showed a decline in their comprehension scores. Of the group that showed an increase in comprehension, two students were English Language Learners (ELL); of the group that showed no increase, one student was an ELL; and of the group that indicated a decline in comprehension scores, two students were ELL. Half of the students made significantly fewer miscues with the practiced reading. Gender did not appear to influence results, as both males and females appeared in all three groups.

Independent variables that may have influenced the outcome are: 1) Length of passage. The passage in the pretest consisted of 261 words; the passage in the posttest consisted of 288 words. Both passages were longer than those typically practiced in class (100-160 words). 2) Vocabulary: The word "suburbs" eluded most of the students in terms of meaning. Even with context clues, most of the students failed to ascertain its connotation. 3) Reading level: While all of the students tested were in Title 1 Reading, clearly there were differences in their abilities. The students could be grouped into high, average, and low ability. The greatest growth appeared in the low group, followed by the average group, with the least amount of growth occurring in the high ability group.

4) Number of times allowed to practice reading the passage. Research indicates that the most growth in fluency occurs between the 3rd and 5th reading of a passage (Dowhower, 1989). Perhaps some of these students needed to practice reading the passage five times, rather than three times for optimal growth.

Past research suggests that all students should benefit from repeated readings; however, much of the available research looked at students reading below grade level. The results reported above coincide with similar research done by Lipson and Lang (1991). They found that fluency was influenced by several factors: the reading selections, word recognition accuracy, and practice reading contextual materials. Therefore, it is possible that narrative passages instead of expository text would yield much different results in terms of the third grade Title 1 Reading students. Additionally, results might be different if the group was from a higher socio-economic group, as poverty is one factor highly aligned with low reading achievement (Au, 2002).

Table Showing Results

Student ID	Gender 1 male 2 female	Pre-test WCPM	Posttest WCPM	WCPM increase	Pre-test # of questions correct	Post-test # of questions correct	Prosody pre-test	Prosody posttest
1.00	2	96	132	36	6.5	8	2	4
2.00	1	89	120	31	6	4.5	3	4
3.00	2*	109	116	7	6	5	3	4
4.00	2*	95	108	13	5	3	2	3
5.00	1	67	105	38	6	6.5	2	3
6.00	2	81	100	19	5.5	6.5	2	3
7.00	2	78	98	20	5	5	2	3
8.00	2*	77	93	16	1	5	2	3
9.00	1*	64	88	24	3	4.5	1	3
10.00	2	60	78	18	4.5	6	2	3
11.00	2*	65	75	10	6	6	2	3
12.00	1	62	65	3	6	6	2	2

Pre-test and posttest results for WCPM, comprehension, and prosody*indicates English Language Learner (ELL)

Discussion

The goal of this study was to better understand the impact oral reading fluency has on analysis skills. Because of inadequate sample size, the results were inconclusive, which explains the small effect size oral reading fluency had on reading comprehension. Another variable that affected the outcome was the number of students on free or reduced lunch, as poverty is one of the factors most highly aligned with low reading achievement (Au, 2002).

The study could have been improved by extending testing over a longer period of time, perhaps several months, and by looking at a larger sample comprised of different grade levels. This way growth could be measured over time and against grade level, in order to determine whether more growth occurs at a particular point in the school year or at a certain age. Additionally, several reading passages should have been administered instead of a single expository passage, as students perform differently while reading different texts. Results might have been much higher if a narrative passage was used instead of the expository one.

Proficiency levels that were once deemed adequate in previous generations are no longer so in today's society with the aggressive economic demands placed on it. Goals need to be reasonable, yet rigorous. Consequently, there is an awareness of the importance of students experiencing success in reading at an early age and the liability that ensues if they fail to do so. Prevention is the key. Catching up is next to impossible for many struggling readers, as well as costly. Of equal importance is teacher education and preparation in the area of literacy. It is essential that teachers be knowledgeable about which skills are needed for reading, what constitutes proficiency, and how to

effectively teach those skills. Perhaps we need to reexamine our current view of fluency and the way it is used in the classroom. Rather than using it primarily with younger students, we need to integrate it into the curriculum with older readers as well. In 1895, M. W. Hazen published *A Complete Course in Reading*. Hazen provided suggestions to teachers in reading instruction. He felt that developing oral reading fluency was of paramount importance, second only to comprehension. With the development of reading fluency came an increased understanding of text (Stayter & Allington, 1991). Past research indicates that there is a connection between oral reading fluency and comprehension. While this study found that the 3rd grade students involved made gains in rate of reading and accuracy, additional studies are needed to extend this existing body of information and to make its use more practical for teachers and researchers.

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Appendix

National Assessment of Educational Progress – Oral Reading Fluency Scale

Level 4	Reads primarily in larger, meaningful phrase groups. Although some regressions, repetitions, and deviations from text may be present, these do not appear to detract from the overall structure of the story. Preservation of the author's syntax is consistent. Some or most of the story is read with expressive interpretation.
Level 3	Reads primarily in three or four-word phrase groups. Some smaller groupings may be present. However, the majority of phrasing seems appropriate and preserves the syntax of the author. Little or no expressive interpretation is present.
Level 2	Reads primarily in two-word phrases with some three- or four-word groupings. Some word-by-word reading may be present. Word groupings may seem awkward and unrelated to larger context of sentence or passage.
Level 1	Reads primarily word-by-word. Occasional two-word or three-word phrases may occur-but these are infrequent and/or they do not preserve meaningful syntax.

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